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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,714	02/25/2002	Alexander Jan Carel De Vries	105531.01	9142

7590 01/07/2003

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EXAMINER

NGUYEN, TRINH T

ART UNIT

PAPER NUMBER

3726

DATE MAILED: 01/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/080,714

Applicant(s)
Carel Vries De et al.

Examiner
Trinh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 27, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, and 4-6 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, and 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Patent Abstract of Japan Publication Number 04321816 to Mayumi Toru (hereinafter is referred to as Toru) in view of Miyasaka (US 5,592,840).

Toru discloses a method of manufacturing a roller element bearing wherein the method comprising forming recesses on the surfaces of the roller element. Note that the recesses are provided with lubricant. Toru discloses all of the limitations as claimed except for: 1) forming the recesses by shot peening and 2) that an average angle between a wall of each recess on the at least one surface is less than 5 degrees.

Regarding 1), Miyasaka teaches a method of improving abrasion resistance of a metal-product such as a machine part (note that Toru's roller element bearing can be considered as a machine part) by shot-peening. Note that Miyasaka's shot-peening method uses glass beads. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used Miyasaka's shot-peening method to form recesses in the surfaces of Toru's

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roller element, as suggested by Miyasaka, so as lubricating oil can be retained in the recesses more efficiently (see Abstract in Toru and last 8 lines of Abstract of Miyasaka.

Regarding 2), it would have been obvious, if not already, to one having ordinary skill in the art at the time the invention was made to have set the average angle at a specific value as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and it would appear that the average angle such as one in Miyasaka would perform equally as well. An angle of less than 5 degree is well within the level of skill of the ordinary artisan. Furthermore, it would appear as though the angles in the Toru device as modified above are clearly less than 5 degree.

Regarding claim 2, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have set the diameter at a specific value as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and it would appear that the diameter such as one in Miyasaka would perform equally as well.

Regarding claim 5, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have set the diameter of the glass bead at a specific value as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and it would appear that the diameter of the glass bead such as one in Miyasaka would perform equally as well.

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Response to Arguments

3. Applicant's arguments filed 11/27/02 have been fully considered but they are not persuasive.
4. In response to Applicants' argument that neither Toru nor Miyasaka teach an average angle between a wall of each recess on the at least one surface is less than 5 degrees, Applicants are referred to paragraphs # 1 & 2 above for further explanation/support.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Official documents related to the instant application may be submitted to the Technology Center 3700 mail center by facsimile at (703) 305-3579/3580.


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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh Nguyen whose telephone number is (703) 306-9082.

ttn

January 3, 2003


GREGORY VIDOVICH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700